



LETTERS TO THE EDITOR

Pedagogical innovation in health sciences: an urgent need

Innovación pedagógica en ciencias de la salud: una necesidad urgente

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Dear Director:

The authors of this paper base their work on the article by Batista Reyes et al. (1) "Educación en el Trabajo: contribución a la formación de valores de los estudiantes de Enfermería", Published in vol. 5 of 2025. It refers to work-based learning as a source of acquiring values and represents an active and



creative teaching methodology implemented in Cuba in the 1990s following the crisis generated in society by the fall of the socialist bloc.

In this regard, it is necessary to reflect on issues related to pedagogical innovation in the health sciences. Health sciences education is undergoing a profound transformation. It is no longer enough to transmit technical knowledge; today, there is a demand to train professionals capable of adapting, collaborating, and responding to complex challenges in changing environments.

As highlighted by Salazar Rodríguez et al. ⁽²⁾, "the training of medical professionals constitutes a current educational problem, with challenges related to the curricular approach, the integration of knowledge, and the need for skills beyond the purely technical."

For decades, teaching in Medicine and other health disciplines was based on lectures and hospital rotations. However, methodologies such as problem-based learning (PBL), clinical simulation, interdisciplinary collaborative work, and the use of immersive technologies are revolutionizing the way teaching and learning take place. ⁽³⁾

In the authors' opinion, these strategies not only improve knowledge retention but also develop critical skills such as decision-making, effective communication, and ethical thinking.

In the Cuban case, since the 1959 Revolution, the country has been committed to free, universal, and profoundly humanistic medical education. The integration of study with work has been a guiding principle, where students are trained in direct contact with the community and health services.

Prominent Cuban medical educators such as Ilizástigui Dupuy, Salas Perea, and Fernández Sacasas promoted a critical and transformative vision of teaching in Cuba. The work of these professors highlights the value of practical experience and direct interaction with patients in medical training, thus demonstrating how education can contribute to a more just and equitable health system. ⁽⁴⁾

It can be stated that innovation in health in Cuba is not limited to biotechnology or clinical research. It also encompasses the development of pedagogical tools that enable the training of professionals capable of addressing epidemiological, social, and ethical challenges. The management

of health science, technology, and innovation is aligned with priorities that ensure relevance and sustainability.

A clear example of the above approach was during the COVID-19 pandemic⁽⁵⁾, where pedagogical improvement strategies were implemented that combined digital resources, community work, and continuing education, even in primary care settings.

Innovation in the health sciences involves unlearning obsolete practices, questioning routines, and embracing change. This, therefore, requires institutional commitment, ongoing teacher training, and a culture of evaluation and improvement.

Furthermore, it is not just an academic matter; it is an ethical commitment to training professionals capable of transforming reality. In times of health and technological uncertainty, we need courageous educators who dare to innovate, and critical students who dare to learn differently.

Therefore, pedagogical innovation is not a luxury, but an urgent necessity to continue transforming Higher Medical Education and the expected curricular outcomes.

BIBLIOGRAPHIC REFERENCES

1. Batista-Reyes Y, Guirola-Fuentes J, Pulido-Almeida M. Educación en el Trabajo: contribución a la formación de valores de los estudiantes de Enfermería. MedEst [Internet]. 2025 [cited 28/07/2025]; 5:e274. Available in: <https://revmedest.sld.cu/index.php/medest/article/view/274>
2. Salazar-Rodríguez Y, Mondéjar-Rodríguez JJ. Enseñanza problémica y neuroeducación, un enfoque necesario para la educación médica superior. Rev Méd Electrón [Internet]. 2025 [cited 28/07/2025]; 47:e6350. Available in: <https://revmedicaelectronica.sld.cu/index.php/rme/article/view/6350>
3. Luque Suárez JC. Innovación y transformación en la educación de las ciencias de la salud: retos, oportunidades y compromiso ético. Rev. Med [Internet]. 2024 [cited 28/07/2025]; 32(2):7-9. Available in: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0121-52562024000200007&lng=en



4. Martínez-Asanza D, Rojas-Herrera IA, Martínez-López HO. Ilizástigui Dupuy, Salas Perea y Fernández Sacasas, pilares de la educación médica cubana. FEM (Ed. impresa) [Internet]. 2024 [cited 28/07/2025]; 27(5):199-200. Available in <https://dx.doi.org/10.33588/fem.275.1353>.

5. Salazar Rodríguez Y, Estrada Rodríguez Y, Rojas Moreno VL, Gallego Sánchez JA, Naranjo Lima S, Alemán Marichal BY. Análisis bibliométrico de las publicaciones de Covid-19 en la Revista Cubana de Medicina. Rev Cubana Med [Internet]. 2025 [cited 28/07/2025]; 64. Available in: <https://revmedicina.sld.cu/index.php/med/article/view/4998>

AUTHORSHIP STATEMENT

YSR: Conceptualization, research, methodology, project management, validation, drafting of the original manuscript, revision, and editing.

IRH: Conceptualization, research, methodology, validation, and revision.

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CONFLICTS OF INTEREST

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